

# Appendix T

## Plant Pest Interceptions

#### **Contents**

```
Introduction page T-1-1
Policy on Identifying Intercepted Specimens
                                            page T-1-2
  Authority of PPQ Officers to Make Identifications
                                                  page T-1-2
  Authority of Area Identifiers to Make Identifications page T-1-2
Preparing Specimens for Identification
                                      page T-1-3
  Arthropods
               page T-1-3
  Honey Bees
               page T-1-5
  Host or Other Plant Material, Including Noxious Weeds
                                                        page T-1-6
  Mollusks
            page T-1-7
  Nematodes
               page T-1-8
Plant Diseases page T-1-9
  Selecting Material for Plant Disease Identification
                                                    page T-1-9
  Preparing and Preserving Plant Disease Material
                                                   page T-1-9
Marking Reference Specimens for Distribution to the General Public
                                                                   page T-1-10
Classifying and Routing Interceptions for Identification page T-1-11
  Routine Interceptions
                         page T-1-11
  Prompt Interceptions
                        page T-1-12
  URGENT Interceptions page T-1-12
Sending Specimens for Identification page T-1-13
  Records
            page T-1-13
  Packaging the Specimens
                            page T-1-13
  Special Instructions for Honey Bee Specimens
                                                 page T-1-14
List of Reportable and Nonreportable Interceptions
                                                   page T-1-16
  Entomology List E1, Nonreportable Interceptions
                                                   page T-1-16
  Entomology List E2, Reportable Interceptions
                                                page T-1-17
  Entomology List E3, Reportable Interceptions
                                                page T-1-17
  Entomology List E4, Apoidea Nonreportable and Reportable Interceptions
    page T-1-18
  Botany List B1, Nonreportable Interceptions
                                               page T-1-19
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#### Introduction

Plant pest interceptions from imported commodities provide documented evidence of the value of plant quarantine activities. Historical records of interceptions are the best evidence of how pests enter the United States. Interception records provide a basis for decision making in Plant Protection and Quarantine (PPQ). The interception records are used in conducting pest risk assessment and in determining the personnel and equipment needs at ports of entry. Pest interception information is available to field managers and identifiers through accessing the Port Information Network (PIN) and the PIN 309 database.

All PPQ personnel involved in the interception, identification, and recording of interceptions are responsible for following the guidelines in this appendix.

Before assessing the quarantine significance of an interception, the specimen must be properly identified. The procedures in this appendix are designed to enable PPQ personnel to properly prepare and, when necessary, forward the interception for final identification. Officers are encouraged to identify all interceptions made. Identifying and recording of interception information must be accurate, uniform, and timely for the interception records to be of value.

## **Policy on Identifying Intercepted Specimens**

Authority to identify interceptions may be granted to PPQ officers or Area Identifiers. Identification at the field level is encouraged because it results in a faster response time to interceptions taken in imported commodities and in the detection of plant pests of quarantine significance within PPQ's Domestic and Emergency Programs. Methods of gaining authority are listed below.

#### **Authority of PPQ Officers to Make Identifications**

A PPQ officer may be granted authority to identify plant pests and diseases from an Area Identifier. Request authority to identify on PPQ Form 371, Request Authority to Identify, and submit to the Area Identifier after making at least three consecutive, correct identifications, or after completion of specimen test kits, or after consultation with one of the previously mentioned authorities. PPQ officers have authority to identify plant pests and diseases **only** when they have been granted authority, usually by delegated authority from an Area Identifier. Unless the officer has authority, all interceptions should be submitted to the appropriate Area Identifier.

## Authority of Area Identifiers to Make Identifications Authority for Area Identifiers to identify plant pests and diseases may be gained in one of the following ways:

- ◆ Specific written authority from Riverdale by memo
- ♦ PPQ Form 371
- ◆ Conferred authority with the position as in *List of Reportable* and *Nonreportable Interceptions* on page T-1-16

Authority for organisms, *Entomology List E1*, *Nonreportable Interceptions* on **page T-1-16** does **not** need to be requested on PPQ Form 371.

## **Preparing Specimens for Identification**

Use the following procedures for preparing specimens for identification. Treat or safeguard all host material to eliminate pest risk. Rearing intercepted specimens is **prohibited** without the proper authority. **Never** attempt to rear plant pests without authorization from Biological and Technical Services (B&ATS) (formerly Permits and Risk Assessments) in Riverdale, Maryland.

For guidance in preserving insects, refer to any of the following publications:

- ◆ USDA Miscellaneous Publication No. 1443, *Insects and Mites: Techniques for Collection and Preservation*, edited by G. C. Stayskel, W. L. Murphy, and E. M. Hoover, 1986
- ◆ An Introduction to the Study of Insects, Borror, Triplehorn, and Johnson, Sixth edition or any of the previous editions

#### **Arthropods**

Use **Table T-1-1** to determine how to preserve your arthropod specimen.

TABLE T-1-1 Determine How to Preserve Arthropod Specimens

If the taxon of the specimen is:	Then:
◆ Acarina	PRESERVE specimens in alcohol
◆ Coleoptera	(see Preserving Arthropod Specimens in Alcohol on page T-1-4)
◆ Dermaptera	,
◆ Diptera	
◆ Heteroptera	
◆ Homoptera <sup>1</sup>	
◆ Hymenoptera	
◆ Isoptera	
◆ Lepidoptera (immatures)	
◆ Orthoptera (immatures)	
◆ Thysanoptera (adults) <sup>2</sup>	
Homoptera on host material (scale insects and immature psyllids)	PRESERVE specimens by dry mounting (see <i>Preserving Arthropod Specimens by Dry</i>
Lepidoptera (adults)	Mounting on page T-1-4)
Orthoptera (adults)	

- 1 **Except** whiteflies, scales, and immature psyllids on host material.
- 2 Add a few drops of vinegar (acetic acid) to the alcohol in vial.

### Preserving Arthropod Specimens in Alcohol

If, after referring to **Table T-1-1**, you have determined that alcohol is the proper method of preservation, then preserve the specimens as follows:

- 1. For adult specimens, kill by placing them in 70 percent alcohol, as follows:
  - A. Select shoulder-type vials over shell vials because they are stronger and provide better protection for the specimens
  - B. Fill vials three-quarters with alcohol and make sure the stoppers fit securely
  - C. Bleed air pressure when necessary
  - D. For delicate specimens, place wadded paper within the vials to minimize specimen movement.
  - E. Use screw-cap vials for small specimens.
  - F. Avoid using cork stoppers because they allow alcohol to evaporate and could result in specimen loss during extended storage.
- 2. For larvae specimens, kill larvae by doing the following:
  - A. Place the larvae in water.
  - B. Slowly bring the water to boiling point.
  - C. Allow the specimen to cool down.
  - D. Place the specimen in a vial with alcohol.
  - E. Select shoulder-type vials over shell vials because they are stronger and provide better protection for the specimens.
  - F. Fill vials three-quarters with alcohol and make sure the stoppers fit securely.
  - **G.** Bleed air pressure when necessary.
  - H. For delicate specimens, place wadded paper within the vials to minimize specimen movement.
  - I. Use screw-cap vials for small specimens.
  - J. Avoid using cork stoppers because they allow alcohol to evaporate and could result in specimen loss during extended storage.

## Preserving Arthropod Specimens by Dry Mounting

Preserve arthropod specimens by dry-mounting using the following steps:

- 1. Make sure all specimens are dead. If the specimen is **not** dead, you may use one of the following killing agents:
  - Ethyl acetate
  - Trichoroethylene
  - Cyanide



Use killing agents with care and follow the label directions.

Also, you may seek instructions from the Area Identifier for alternative killing measures.

- 2. Label all killing bottles containing the killing agents above with "**POISON**."
- 3. Pin dead adult specimens of Lepidoptera and Orthoptera before shipping, as follows:
  - A. Spread and pin adult Lepidoptera and Orthoptera on styrofoam pinning blocks.
  - B. Pin the styrofoam blocks to the bottom of the pinning box.
  - C. Use small pinning boxes and place these, snugly padded, inside a shipping box.
  - D. Seek instructions from your Area Identifier for additional information.
- 4. Partially dry host material with insects (for example, scale insects and whiteflies) before placing in the container.
- 5. Unless the host material is thoroughly dry, pack to permit drying after closure of container without damaging specimens (see *Host or Other Plant Material, Including Noxious Weeds* on page T-1-6). Cut as thin a slice as possible of the fruit or vegetable peel.

#### **Honey Bees**



If interception is made during an Africanized Honey Bee Survey, then see **Special Instructions for Honey Bee Specimens** on **page T-1-14**.

For honey bee specimen identification, do the following:

- 1. Place at least 10 intact adult bees in 70 percent alcohol.
- 2. Place about 100 adult bees in 70 percent alcohol for mite examination.

**3**. Package a sample of honeycomb, if available, carefully so that it is **not** crushed.

Host or Other Plant Material, Including Noxious Weeds For identification of host or other plant material, including noxious weeds include as many plant parts as possible with your specimen. (For example, fruit, flowers, leaves, buds, stems, roots, bark, wood, or spines.) Prepare the specimen as follows:

- 1. Press and dry all specimens using standard herbarium techniques, if possible.
- 2. Send pressed and dried plants in newspaper sheets bound between corrugated cardboard.
- 3. Place dry seeds in vials or resealable plastic bags. **Never** place seeds in alcohol. If you use vials, tighten vial caps so they don't come off during shipment.

#### Preserving Soft Fruits for Identification

If sending soft fruits for identification, preserve at least one specimen dry and place one to two specimens in alcohol for 48 hours. Drain the alcohol from the jars and pack the fruit firmly in a jar to prevent shifting during mailing.

Complete and submit PPQ Form 309, Interception Record, for each pest intercepted or host that you want identified. Give each interception a unique number. Also, give an interception number to host material you're sending in for identification. If the host material is associated with a pest, assign numbers to the host and intercepted pest so that either may be cross-referenced.

When completing the PPQ Form 309, fill in the country of origin as accurately as possible. When completing *Block 2* (pest block) of PPQ Form 309, enter **one** of the following:

- Noxious weed
- Host identification
- **♦** Plant identification
- **♦** Seed identification

On a separate sheet of paper, list the following information when submitting host or other plant material, including noxious weeds:

- All common names
- ◆ Uses of plant or plant parts (for example, medicinal, tea, spice)
- ◆ Any information which could give clues for identification

**Do not** type this information on the bottom of the PPQ Form 309. List it on a separate sheet of paper. Using a paper clip, attach the sheet of paper to the PPQ Form 309.

If the interception is **not** an URGENT, hold it until the host is identified.

#### **Mollusks**

Routine
Interceptions of
Terrestrial Snails
and Slugs
Except for Giant
African Snails
(Achatina and
Archachatina
spp.), and
Tropical Slugs
(Veronicellidae)

Use the following procedures for routine interceptions of terrestrial snails and slugs, **except** giant African snails, aquatic snails, and tropical slugs:

- 1. Place the mollusk in a vial or specimen bottle of water.
- 2. Hold the vial or specimen bottle under water and seal, making sure that no air bubbles remain inside the container.
- 3. Put the container containing the specimen in a cool place until the mollusk has relaxed (has died and is fully extended). This relaxation will take between 12 and 24 hours.
- 4. Transfer the relaxed mollusk to 70% ethanol.
- 5. Submit the specimen for identification.

Routine
Interceptions of
Giant African
Snails (Achatina
and
Archachatina
spp.), Aquatic
Snails, and
Tropical Slugs
(Veronicellidae)



Because of snail-borne parasitic diseases, wash your hands in hot soapy water or rinse them in a standard disinfectant after handling these mollusks.

Use the following procedures for routine interceptions of Giant African Snails (*Achatina*) and (*Archachantina spp*), Aquatic Snails, and Tropical Slugs (Veronicellidae):

- 1. Place the mollusk directly in a vial or specimen bottle with 70% ethanol.
- 2. Submit the specimen for identification as follows:

URGENT
Interceptions of
Terrestrial Snails
Except for Giant
African Snails
(Achatina and
Archachatina
spp.), Aquatic
Snails, and
Slugs Except for
Tropical Slugs
(Veronicellidae)

URGENT
Interceptions of
Giant African
Snails (Achatina
and
Archachatina
spp.), Aquatic
Snails, and
Tropical Slugs
(Veronicellidae)

- **\*** When shipping Monday through Thursday:
  - i. Place the mollusk in a vial or specimen bottle of water.
  - ii. Hold the vial or specimen bottle under water and seal, making sure that no air bubbles remain inside the container.
  - iii. **Overnight** the urgent interception for identification (the snail will have drowned in transit, hence, there is no pest risk).
- When shipping Friday through Sunday
  - i. Place the mollusk directly in a vial or specimen bottle 70% ethanol. If there is time (12-24 hours), relax the specimen in water as described for routine interceptions. (Place the mollusk in a vial or specimen bottle and hold the vial or bottle under water and seal, making sure that no air bubbles remain inside the container. Put the vial or bottle containing the specimen in a cool place until the mollusk has relaxed—has died and is fully extended.)
  - ii. **Overnight** the urgent interception for identification.



Because of snail-borne parasitic diseases, wash your hands in hot soapy water or rinse them in a standard disinfectant after handling these mollusks.

Prepare the URGENT interception for shipment as follows:

- 1. Place the mollusk directly in a vial or specimen bottle 70% ethanol.
- 2. **Overnight** the URGENT interception for identification.

#### **Nematodes**

Prepare nematodes for specimen identification as follows:

- 1. Place material in a plastic bag to prevent the host material from drying if you are forwarding nematode-infested host material.
- Separate nematodes from infested material and place in a vial of water. Slowly apply heat until the nematodes stop moving.Do not overheat.
- 3. Prepare either one of the fixatives in **Table T-1-2** below.

TABLE T-1-2	Determine	Fixative	Formula	for	Nematodes
-------------	-----------	----------	---------	-----	-----------

If using fixative:	Then mix together:
3 percent formaldehyde	1 part commercial Formalin
	12 parts water
TAF	7 ml Formalin
	2 ml Triethanolomine
	91 ml water

- 4. Add to the vial containing the specimens a volume of double-strength fixative equal to the volume of water in the vail.
- 5. Place cysts of *Globodera* spp., mature females of *Meloidogyne* spp., and other non worm-like nematodes directly into single-strength fixative without heating.

#### **Plant Diseases**

### **Selecting Material for Plant Disease Identification**

Because diseases have complex life cycles, and specimens of different stages of the disease life cycle are helpful in making identifications, select material showing as many stages of disease life cycle as possible. Early stages of the disease may show important diagnostic signs and symptoms, while older material may have the perfect stage of a fungus. Send an ample amount of diseased material.

Since some diseases may be identified by symptoms, when possible, ship disease specimens in a natural state to the Area Identifier. Symptoms may be modified or destroyed if the host material becomes dried, molded, shriveled, or decayed. When cutting the diseased portions of fruits and vegetables, include a generous margin of healthy tissue. Cut as thin a slice as possible of the fruit or vegetable peel. If the material is soft or pulpy, then partially dry the material and pack between sheets of stiff, absorbent paper to keep the diseased area flat. **Do not** fold leaf specimens. Partially dry succulent leaves before shipping.

#### **Preparing and Preserving Plant Disease Material**

Prepare specimens of plant disease material for identification as listed below.

## Large Specimens

Prepare large specimens of plant disease material for identification as follows:

- 1. Pack large specimens to prevent movement in the shipping container.
- 2. Place crumpled newspaper around the specimens to prevent movement.

#### Multiple Determinations

When more than one disease is evident, circle the diseased area with India ink or in a way to indicate the diseased area.

#### Slide Mounts

Prepare slide mounts of the disease for identification as follows:

- 1. Make a slide mount of the disease in cross section if possible.
- 2. Seal the slide and write the following information on the slide label:
  - i. Interception number
  - ii. Country of origin
  - iii. Date
  - iv. Collector
  - v. Port/Location
  - vi. Host
  - vii. Tentative identification

Soil

Most ports are equipped to sample soil interceptions for nematodes. When it is necessary to ship soil to another office, do as follows:

- 1. Place a representative sample of 500 g or less (approximately 1 pound) in a metal can or other suitable container.
- 2. **Do not** sift the sample.
- 3. Remove rocks, pebbles, and large pieces of debris by hand.
- 4. Seal the container lid with nylon reinforced (filament) tape to prevent leakage.
- 5. Wrap the entire container in heavy wrapping paper.

## Marking Reference Specimens for Distribution to the General Public

Preserved pest specimens, insects, or diseases distributed to the general public (including foreign nationals) must be permanently marked so they can be distinguished from all other specimens.

Florescent paint or powder is a satisfactory marker and is available at art supply stores. Florescent marking is visible when viewed under a 15 watt blacklight bulb (18"). These bulbs will fit into standard 15 watt florescent desk lamps. When specimen markings or verification is necessary, forward specimens to the nearest Area Identifier before distributing.

When using fluorescent spray paint for marking specimens, do as follows:

- 1. Before marking, clear the nozzle of excess paint.
- 2. Follow the instructions on the can of florescent paint. Hold the can 18 to 24 inches from the specimen to avoid over marking. Too much paint will affect the coloration of the specimen.
- 3. Avoid marking insects of various body textures at the same time. Certain textures take up or reflect the paint more readily than others.

TABLE T-1-3 Determine How to Mark Specimens with Fluorescent Spray for Identification

If marking:	Then:
Adults	APPLY spray in short, 1-second bursts; application time will vary depending upon the type of insect being marked. Small bodied insects (flies and ants) will take more time than large insects with hard, smooth bodies (beetles)
Larvae	PLACE larvae on a paper towel or blotting paper to remove excess surface moisture     WAIT 1 to 2 minutes     APPLY spray in short, 1-second bursts     RETURN specimens to alcohol before they dry out

4. Check all marked specimens under the blacklight bulb before distributing.

## Classifying and Routing Interceptions for Identification

## **Routine Interceptions**

Classify an interception as "Routine" when neither foreign cargo nor conveyances are being held and when a quick identification is **not** necessary. You may hold "Routine" interceptions until you have a grouping—a schedule worked out in your work unit (for example, once a week when you have accumulated 10).

Work units are to send "Routine" interceptions to the appropriate Area Identifier by regular mail. (See *List of Area Identifiers* on **page I-1-2**.) If necessary, the Area Identifier will then forward the interceptions to a National Specialist. (See *List of National Specialists for Routine and Prompt Interceptions* on **page I-1-14**.)

#### **Prompt Interceptions**

Classify an interception as "Prompt" when a quick identification is required and no foreign cargo or conveyances are being held. Send "Prompt" interceptions **immediately** by regular mail to the appropriate Area Identifier. No telephone identification results are required for Prompt interceptions. Type "Prompt" on PPQ Form 309.

Work units are to send "Prompt" interceptions to the appropriate Area Identifier by regular mail. (See *List of Area Identifiers* on **page I-1-2**.) If necessary, the Area Identifier will then forward the interceptions to a National Specialist. (See *List of National Specialists for Routine and Prompt Interceptions* on **page I-1-14**.)

#### **URGENT Interceptions**

Classify interceptions as URGENT when quarantine actions depend on host or pest identification or when immediate identification is required for a domestic collection. Your Area Identifier will determine whether you are to send the URGENT interception to him or her, or directly to the National Specialist. The decision to send the interception to the Area Identifier or National Specialist can be either on a case-by-case basis or by a prior agreement.

When mailing URGENT interceptions, take the following steps:

- 1. Package the interception as described in **Sending Specimens for Identification** on **page T-1-13**.
- 2. Type URGENT on the mailing label and on PPQ Form 309.
- 3. Put a 2-inch band of yellow and black striped tape around both ends of the mailing container.
- 4. Mail by a designated **overnight** delivery service.

See **page I-1-2** for the addresses of Area Identifiers and **page I-1-12** for the addresses of National Specialists.

## **Sending Specimens for Identification**

#### **Records**

Use PPQ Form 309 for forwarding interceptions made in predeparture items and imported items. For instructions on completing PPQ Form 309, Interception Record, see **page A-1-54**. This form **must be** typed.

Use PPQ Form 391, Specimens for Determination, for domestic collections (warehouse inspections, local and individual collecting, special survey programs, export certification). For instructions on completing PPQ Form 391, see **PPQ Form 391, Request for Identification** on **page A-1-62**.

#### Packaging the Specimens

#### Packaging Specimens in Vials

Package specimens in vials as follows:

- 1. Write or type the interception number on a standard interception envelope.
- 2. Twist the vial cap until it is secure and place the vial in the envelope.
- 3. Complete the proper form and paper clip the unfolded form to the outside of each envelope.
- 4. Put the envelope and form in either a mailing tube or a box (2" x 4" x 8" cardboard box). **Do not** use padded envelopes because the contents are frequently crushed in transit.
- 5. Put packing material around the vial so that it will **not** break during shipping. If Hyattsville requests a live specimen, use a container within a container.
- **6**. Wrap the container securely using reinforced tape.

#### Packaging Moist Materials

Since moist materials tend to cause the standard interception envelope to stay open, you may use either a paper bag or newspaper instead of the standard envelope, as follows:

- 1. Write or type the interception number on a paper bag or, if using newspaper, on a separate sheet of paper and then tape to the newspaper.
- 2. Complete the proper form and paper clip the unfolded form to either the paper bag or the newspaper.
- 3. Place the paper bag or paper containing the specimen in a mailing tube or box.
- 4. Wrap the container securely using reinforced tape.

## Packaging Slides

#### Package slides as follows:

- 1. Write the following information on the slide label:
  - Interception number
  - Country of origin
  - Date
  - Collector
  - Port/location
  - **❖** Host
  - Tentative identification
- 2. Pack the slide inside a cardboard slide mailer or a plastic slide box. If you use the cardboard mailer, cut two small pieces of rubber band. Place one piece of rubber band on top of each end of the slide. The small pieces of rubber band will prevent the slide cover from rubbing on the inside of the mailer. See

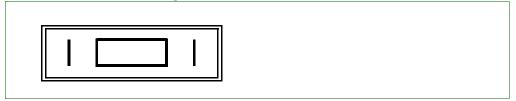


FIGURE T-1-4 Example of Properly Packaged Slide

#### Figure T-1-4.

- 3. Close and secure the mailer or slide box with a rubber band.
- 4. Place the mailer or slide box inside an interception envelope.
- 5. Paper clip the appropriate unfolded form (PPQ Form 309 or 391) to the interception envelope.
- 6. Put the envelope and form in a mailing box (2" x 4" x 8" cardboard box). **Do not** use padded envelopes because the contents are frequently crushed in transit.
- 7. Put packing material around the mailer or slide box to prevent movement during shipping.
- 8. Wrap the mailing box securely using reinforced tape.

## **Special Instructions for Honey Bee Specimens**

Bees taken in the Africanized Honey Bee (AHB) Domestic Survey should be tested using the Fast Africanized Bee Identification System (FABIS). Contact either your Area Identifier or BATS for the nearest testing facility. If the FABIS test results indicate European bees, then no additional identification is needed.

If any of the following circumstances exist, then send the bees by **overnight** delivery to the Bee Research Laboratory:

- ◆ Swarms of bees are intercepted on carriers, cargo, or found moving in foreign commerce at U.S. Ports of Entry
- ♦ Swarms of bees are involved in severe stinging incidents
- ◆ Samples test as possible Africanized (average wing length is 9.0 mm or less) by the FABIS screening technique. Send slide-mounted wings and additional bees if possible

Send the following to the laboratory:

- ◆ 10 (minimum) intact adults bees
- ◆ 100 adult bees for mite examination
- ◆ Sample of honeycomb, if available (package to prevent crushing)
- ◆ Note regarding presence or absence of queen or drones in swarm (specimens are **not** necessary)

Call Dr. W. S. Sheppard at 301/504-8205 whenever you send bees to the Bee Research Laboratory as URGENT.

## List of Reportable and Nonreportable Interceptions

#### **Entomology List E1, Nonreportable Interceptions**

Identify to order or family as applicable, release commodity, and discard specimens. Area Identifiers need **not** request authority for these groups. All Area Identifiers are expected to be able to identify the following nonplant pest groups in **Figure T-1-5**.

```
Phylum Arthropoda
 Class Crustacea
   Order Isopoda (sowbugs)
 Class Arachnida
   Order Araneidae (spiders)
   Order Scorpionida (scorpions)
   Order Uropygi (whip scorpions)
   Order Pseudoscorpiones (pseudoscorpions)
   Order Opiliones (harvestment or daddy long-legs)
 Class Chilopoda (centipeds)
 Class Diplopoda (millipedes)
   Class Insecta
   Subclass Apterygota
     Order Collembola (springtails), except Sminthuridae
     Order Protura (proturans)
     Order Thysanura (Bristletails)
     Order Diplura (Diplurans)
   Subclass Pterygota
     Order Embiidna (webspinners)
     Order Ephemeroptera (mayflies)
     Order Neuoptera (antlions, lacewings, et. al.)
     Order Odonata (dragonflies and damselflies)
     Order Plecoptera (stoneflies)
     Order Psocoptera (Psocids) [Do not confuse with psyllids]
     Order Trichoptera (caddisflies) [Do not confuse with adult moths]
     Order Mecoptera (scorpion flies)
     Order Strepsiptera (stylopids)
     Order Zoraptera (zorapterans)
     Order Dermaptera (earwigs)
     Order Blattodea (roaches)
     Order Coleoptera
      Suborder Adephaga [except Zabrus spp. (Carabidae)]
     Order Diptera [except Agromyzidae, Anthomyiidae, Cecidomylidae, Chloropidae,
      Lonchaeidae, Syrphidae, Tephritidae, Tipulidae, Atheriogona spp. (Muscidae)]
     Order Heteroptera (meiptera)
       Suborder Nepomorpha (aquatic bugs)
       Suborder Gerromorpha (semi-aquatic bugs)
     Order Hymenoptera [except Cynipidae, Chrysididae, Eurytomidae, Formicidae,
       Torymidae, Symphyta (sawflies and horntails) and Apoidea]
```

FIGURE T-1-5 Entomology List E1, Nonreportable Interceptions

## U.S. Insect Fauna

Excluding PPQ program pests, Area Identifiers have the authority to determine without referral those distinctive, domestic species which are well known to the identifier and which have been collected locally.

#### **Entomology List E2, Reportable Interceptions**

Identify to the family or the level required to separate the exceptions listed. Release commodity but routinely forward interceptions to the Systematic Entomology Laboratory (SEL) specialist. Request authority on PPQ Form 371 after making at least three consecutive, confirmed identifications.

Order Coleoptera (**except** those in **Figure T-1-5 on page T-1-16**) *Zabrus* spp. (Carabidae), *Helophorus* spp. (Hydrophilidae)

Families Anthribidae, Bostrichidae, Bruchidae, Buprestidae, Byturidae, Cerambycidae, Chrysomelidae, Curculionidae, Dermestidae, Elateridae, Meloidae, Mordellidae, Platypodidae, Scolytidae, Tenebrionidae

Subfamilies Cetoniinae, Dynastinae (Scarabaeidae), Epilachninae (Coccinellidae), Melolonthinae, Rutelinae

Order Heteroptera (except those in Figure T-1-5 on page T-1-16)

Families Alydidae, Aradidae, Berytidae, Coreidae, Cydnidae, Largidae, Lygaeidae, Miridae, Pentatomidae, Piesmatidae, Pyrrhocoridae, Rhopalidae, Scutellaridae, Thyreocoridae, Tingidae

#### FIGURE T-1-6 Entomology List E2, Reportable Interceptions

#### **Entomology List E3, Reportable Interceptions**

Request authority for the following after making at least three consecutive identifications. When forwarding interceptions where cargo is being held, send the interception as an URGENT. For the following groups, when an interception consists of only larvae or nymphs without adults, identify to family level. Use the family identification to determine if quarantine action is required.

Order Homoptera

Families Adelgidae, Aleyrodidae<sup>1</sup>, Aphididae (to include adult males), Coccidae

Diaspididae

Margarodidae

Pseudococcidae

Psyllidae

#### FIGURE T-1-7 Entomology List E3, Reportable Interceptions

1 When adult whiteflies (Aleyrodidae) are **not** associated with other life stages, identification can only be made to the family level. Use the family identification to determine if quarantine action is required.

To determine if interception of adult Lepidoptera is reportable, see **Table T-1-8 on page-T-1-18**.

TABLE T-1-8 Determine if Interception of Adult Lepidoptera Is Reportable

If the superfamily is:	And:	Then:
◆ Bombycoidea (adult)	Cargo is being held	1. TREAT interception as
◆ Geometroidea (adult)		URGENT
◆ Hesperioidea (adult)		SEND adult Lepidoptera     to SEL specialist (SEL
◆ Papilionoidea (adult)		specialist will identify as
◆ Sphingoidea (adult)		far as possible)
v op.m.goraca (addity	Cargo is <b>not</b> being held	TREAT interception as     Routine or Prompt
		2. IDENTIFY to family only
		3. REPORT on PPQ Form 309
		RETAN specimen in port collection for future reference

# **Entomology List E4, Apoidea Nonreportable and Reportable Interceptions**

All members of the superfamily Apoidea are nonreportable **except** unless identified as non-Africanized European honeybee; see **Table T-1-9** below.

TABLE T-1-9 Determine if Interception of Superfamily Apoida Is Reportable

If:	And:	And:	Then interception is:
Superfamily Apoidea	Species Apis (Apidae) all members	Not identified as non-Africanized Europeon honeybee	Reportable
		Identified as non-Africanized European honeybee	Nonreportable
	Species <i>Coelioxys</i> (Megachilidae)	-	Reportable
	Species <i>Sphecodes</i> (Halticidae)	Subfamily Nomioidinae	Reportable
	Tribes Melectini and Ctenioschelini (Anthophoridae)	-	Reportable

All members (live or dead) of the superfamily Apoidea are regulated under 7CFR 319.76 and 7CFR 322. All identifiers have conferred authority to identify to the superfamily level and all species of *Apis*. If less than 10 adults are intercepted, identify to species and discard with record. If 10 or more adults are intercepted, send interceptions to the Bee Research Laboratory.

#### **Botany List B1, Nonreportable Interceptions**

All Area Identifiers are expected to be able to identify the following plants as seeds, other disseminules, or as whole plants. All identifiers have conferred authority for the following:

- ◆ Seeds listed as agricultural (A) or vegetable (V) in the *Plant Import: Propagative Volume of Manuals*
- ◆ Well recognized fruits, seeds, and vegetative parts sold in grocery stores
- ◆ U.S. Flora—Area Identifiers have authority to determine, without referral, those distinctive domestic species which are well known to them and which have been collected locally

TABLE T-1-10 Discriminate Reportable from Nonreportable Plants and Disseminules

If the structure is:	And the plant is:	And it:	Then:
From a parasitic plant	Absent from or <b>not</b> widely distributed in the U.S.	-	It is REPORTABLE
	Widely distributed in	Does <b>not</b> threaten American agriculture	It is NONREPORTABLE
	the U.S.	Threatens American agriculture	It is REPORTABLE
Not from a parasitic plant		<b>•</b>	GO to Table T-1-11

TABLE T-1-11 Discriminate Reportable from Nonreportable Plants and Disseminules from Nonparasitic Plants

If the structure is:	And it is:	And it is:	And it is:	Then it is:
Identifiable to species	Federal Seed Act (FSA) noxious weed	To be planted	Found in agricultural or vegetable seed	REPORTABLE
	Honous weed		Found in neither agricultural nor vegetable seed	NONREPORTABLE
		<b>Not</b> for propagation		
	Federal Noxious Weed Act (FNWA) noxious weed		-	REPORTABLE
	Neither an FSA nor FNWA noxious weed		-	NONREPORTABLE
Identifiable only to genus or family			-	GO to Table T-1-12

TABLE T-1-12 Discriminate Reportable from Nonreportable Plants and Disseminules from Plants Identifiable Only to Genus or Family

lf:	And the interception is from a country that is:	Then it is:
Noxious weeds exist within that taxon	Within the range of noxious weed species within that taxon	REPORTABLE
	Outside the range of noxious weed species within that taxon	NONREPORTABLE
Noxious weeds are absent from that taxon	-	